

REMARKS

The Office Action dated June 17, 2005, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-20 are presently pending in the application, of which claims 1 and 10 are independent. Claims 1, 3-5, 7, 9-10, and 12-14 have been amended to more particularly point out and distinctly claim the invention. Support for the amendments may be found, for example, in paragraphs 0029 and 0034 of the present specification. No new matter has been added. Claims 1-20 are respectfully submitted for consideration.

Rejections under 35 U.S.C. 102(e)

Claims 1 and 10 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,785,252 of Zimmerman et al. ("Zimmerman"). Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested in the prior art of record.

Claim 1, upon which claims 2-9 depend, is directed to a method of allocating uplink resources including estimating traffic in an uplink, and allocating resources based on said step of estimating, wherein the step of estimating is performed following the transmission of a signal in a downlink.

Claim 10, upon which claims 11-20 depend, is directed to a communication system including estimating means for estimating traffic in an uplink, and uplink

allocation resource means for allocating uplink resources based on said estimating means, wherein the estimating means is arranged to estimate traffic in the uplink following the transmission of a signal in a downlink.

Applicant respectfully submits that the cited reference, Zimmerman, neither discloses nor suggests all of the elements of any of the presently pending claims.

Zimmerman is directed to a method and apparatus for a self-correcting bandwidth request/grant protocol in a wireless communication system. In Zimmerman allocation of resources is partly based on a Round Robin algorithm, as described at col. 24, ll. 24. In the Round Robin scheme, some connections may not receive bandwidth, and thus, implicitly, do not communicate, as described at col. 24, ll. 22-24. Additionally, Zimmerman states that an uplink traffic estimation is performed “to allocate uplink bandwidth to the CPEs, at col. 24, ll. 26-29. Zimmerman further indicates the allocation of uplink bandwidth should precede allocation of downlink bandwidth at col. 24, ll. 41-44. Thus, Zimmerman describes that data traffic is estimated based on the bandwidth requests received from the CPEs and based on an observation of actual data traffic, as described at col. 24, ll. 64-67. Accordingly, Zimmerman allocates uplink capacity prior to beginning downlink, because Zimmerman does not link unless sufficient bandwidth is available, and Zimmerman performs uplink bandwidth allocation prior to downlink bandwidth allocation.

Claims 1 recites “wherein the step of estimating is performed following the transmission of a signal in a downlink.” Claim 10 recites “wherein the estimating means is arranged to estimate traffic in the uplink following the transmission of a signal

in a downlink.” These limitations are not disclosed or suggested by Zimmerman. Instead, as explained above, Zimmerman directs that the allocation of uplink bandwidth is performed before the allocation of downlink bandwidth, and that allocation of resources precedes transmission, as explained at col. 24, ll. 15-67 of Zimmerman. Accordingly, it is respectfully submitted that Zimmerman fails to disclose or suggest at least the limitations referred to above. Accordingly, it is respectfully requested that the rejection be withdrawn.

Rejections under 35 U.S.C. 103(a)

Claims 2 and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of U.S. Patent Application Publication No. 2005/0013287 of Wallentin et al. (“Wallentin”). Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested in the prior art of record.

Zimmerman is discussed above. Wallentin is directed to a method and arrangement for channel type switching. Wallentin aims to improve efficient use of radio network resources. In Wallentin, in some cases uplink requests can be delayed or suppressed if congestion is an issue.

Claims 2 and 11 depend from claims 1 and 10 respectively, and thus are patentable for at least the reasons that claims 1 and 10 are patentable. The cited reference, Wallentin, does not remedy the deficiencies of Zimmerman described above. One of ordinary skill in the art would not modify Zimmerman to change the order of

Zimmerman's operations, because doing so would fundamentally alter Zimmerman's system.

The Office Action's combination of references is impermissible hindsight reconstruction, as described in MPEP 2145. To establish a prima facie case of obvious under 35 U.S.C. 103, it is essential that the Office Action provide some motivation or suggestion to make the claimed invention in light of the prior art teachings. See, e.g., *In re Brouwer*, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996) and MPEP 2144.08. The Office Action does not provide any motivation to combine the references, and accordingly fails to provide a prima facie case for obviousness. As MPEP Section 2143.01 indicates, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Accordingly, it is respectfully requested that this rejection be withdrawn.

Claims 3 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of Wallentin and further in view of U.S. Patent Publication No. 2004/01219917 of Love et al. ("Love"). Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested in the prior art of record.

Zimmerman and Wallentin are discussed above. Love is directed to HARQ ACK/NAK coding for a communication device during soft handover. Love aims to improve HARQ ACK/NAK in such a way to obtain macro selection diversity benefit.

Claims 3 and 12 depend from claims 1 and 10 respectively, and thus are patentable for at least the reasons that claims 1 and 10 are patentable. The cited

reference, Love, does not remedy the deficiencies of Zimmerman and Wallentin described above. One of ordinary skill in the art would not modify Zimmerman to change the order of Zimmerman's operations, because doing so would fundamentally alter Zimmerman's system.

The Office Action's combination of references is impermissible hindsight reconstruction, as described in MPEP 2145. To establish a prima facie case of obvious under 35 U.S.C. 103, it is essential that the Office Action provide some motivation or suggestion to make the claimed invention in light of the prior art teachings. See, e.g., *In re Brouwer*, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996) and MPEP 2144.08. The Office Action does not provide any motivation to combine the references, and accordingly fails to provide a prima facie case for obviousness. As MPEP Section 2143.01 indicates, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Accordingly, it is respectfully requested that this rejection be withdrawn.

Claims 4 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of Wallentin and further in view of U.S. Patent Application Publication No. 2005/0048985 of Haartsen ("Haartsen"). Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested in the prior art of record.

Zimmerman and Wallentin are discussed above. Haartsen is directed to resource management and traffic control in time-division-duplex communication systems.

Haartsen aims to solve the problems associated with previous TDD communication systems, and to provide support for asymmetric service in a TDD system having multi-radio units, smart resource allocation, and smart control of asymmetric traffic.

Claims 4 and 13 depend from claims 1 and 10 respectively, and thus are patentable for at least the reasons that claims 1 and 10 are patentable. The cited reference, Haartsen, does not remedy the deficiencies of Zimmerman and Wallentin described above. One of ordinary skill in the art would not modify Zimmerman to change the order of Zimmerman's operations, because doing so would fundamentally alter Zimmerman's system.

The Office Action's combination of references is impermissible hindsight reconstruction, as described in MPEP 2145. To establish a prima facie case of obvious under 35 U.S.C. 103, it is essential that the Office Action provide some motivation or suggestion to make the claimed invention in light of the prior art teachings. See, e.g., *In re Brouwer*, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996) and MPEP 2144.08. The Office Action does not provide any motivation to combine the references, and accordingly fails to provide a prima facie case for obviousness. As MPEP Section 2143.01 indicates, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Accordingly, it is respectfully requested that this rejection be withdrawn.

Claims 5 and 14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of Love and further in view of U.S. Patent No. 6,697,378 of Patel

("Patel"). Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested in the prior art of record.

Zimmerman and Love are discussed above. Patel is directed to a method and apparatus for class-based transmission control of data connections based on real-time external feedback estimates obtained using messaging from a wireless network. Patel aims, among other things, to improve the overall throughput of a wireless voice/data network and to delay, prioritize, and exploit the latency requirements of various classes of traffic by artificially controlling the burstiness of data packet transmissions to maximize the use of available capacity in a particular cell (sector) in the wireless network.

Claims 5 and 14 depend from claims 1 and 10 respectively, and thus are patentable for at least the reasons that claims 1 and 10 are patentable. The cited reference, Patel, does not remedy the deficiencies of Zimmerman and Love described above. One of ordinary skill in the art would not modify Zimmerman to change the order of Zimmerman's operations, because doing so would fundamentally alter Zimmerman's system.

The Office Action's combination of references is impermissible hindsight reconstruction, as described in MPEP 2145. To establish a prima facie case of obvious under 35 U.S.C. 103, it is essential that the Office Action provide some motivation or suggestion to make the claimed invention in light of the prior art teachings. See, e.g., *In re Brouwer*, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996) and MPEP 2144.08. The Office Action does not provide any motivation to combine the references,

and accordingly fails to provide a prima facie case for obviousness. As MPEP Section 2143.01 indicates, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Accordingly, it is respectfully requested that this rejection be withdrawn.

Claims 6-7 and 15-16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of Haartsen. Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested in the prior art of record. Zimmerman and Haartsen are discussed above.

Claims 6-7 and 15-16 depend from claims 1 and 10 respectively, and thus are patentable for at least the reasons that claims 1 and 10 are patentable. As described above, the cited reference Haartsen does not remedy the deficiencies of Zimmerman. One of ordinary skill in the art would not modify Zimmerman to change the order of Zimmerman's operations, because doing so would fundamentally alter Zimmerman's system.

The Office Action's combination of references is impermissible hindsight reconstruction, as described in MPEP 2145. To establish a prima facie case of obvious under 35 U.S.C. 103, it is essential that the Office Action provide some motivation or suggestion to make the claimed invention in light of the prior art teachings. See, e.g., In re Brouwer, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996) and MPEP 2144.08. The Office Action does not provide any motivation to combine the references, and accordingly fails to provide a prima facie case for obviousness. As MPEP Section

2143.01 indicates, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Accordingly, it is respectfully requested that this rejection be withdrawn.

Claims 8-9 and 17-18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of Haartsen and further in view of Patel. Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested in the prior art of record. Zimmerman, Haartsen, and Patel are discussed above.

Claims 8-9 and 17-18 depend from claims 1 and 10 respectively, and thus are patentable for at least the reasons that claims 1 and 10 are patentable. As described above, the cited references Haartsen and Patel do not remedy the deficiencies of Zimmerman described above. One of ordinary skill in the art would not modify Zimmerman to change the order of Zimmerman's operations, because doing so would fundamentally alter Zimmerman's system.

The Office Action's combination of references is impermissible hindsight reconstruction, as described in MPEP 2145. To establish a prima facie case of obvious under 35 U.S.C. 103, it is essential that the Office Action provide some motivation or suggestion to make the claimed invention in light of the prior art teachings. See, e.g., In re Brouwer, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996) and MPEP 2144.08. The Office Action does not provide any motivation to combine the references, and accordingly fails to provide a prima facie case for obviousness. As MPEP Section

2143.01 indicates, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Accordingly, it is respectfully requested that this rejection be withdrawn.

Claim 19 was rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of U.S. Patent No. 6,868,273 of Cave (“Cave”). Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested in the prior art of record.

Zimmerman is discussed above. Cave is directed to signalling connection admission control in a wireless network. Cave aims to provide a method to determine whether a user equipment should be admitted for control plane signalling, and, if so, whether the user equipment should be admitted for signalling over common resources or dedicated resources.

Claim 19 depends from claim 10, and thus is patentable for at least the reasons that claim 10 is patentable. The cited reference, Cave, does not remedy the deficiencies of Zimmerman described above. One of ordinary skill in the art would not modify Zimmerman to change the order of Zimmerman’s operations, because doing so would fundamentally alter Zimmerman’s system.

The Office Action’s combination of references is impermissible hindsight reconstruction, as described in MPEP 2145. To establish a prima facie case of obvious under 35 U.S.C. 103, it is essential that the Office Action provide some motivation or suggestion to make the claimed invention in light of the prior art teachings. See, e.g., In

re Brouwer, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996) and MPEP 2144.08. The Office Action does not provide any motivation to combine the references, and accordingly fails to provide a prima facie case for obviousness. As MPEP Section 2143.01 indicates, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Accordingly, it is respectfully requested that this rejection be withdrawn.

Claim 20 was rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of Wallentin. Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested in the prior art of record. Zimmerman and Wallentin are discussed above.

Claim 20 depends from claim 10, and thus is patentable for at least the reasons that claim 10 is patentable. As described above, the cited reference, Wallentin, does not remedy the deficiencies of Zimmerman. One of ordinary skill in the art would not modify Zimmerman to change the order of Zimmerman's operations, because doing so would fundamentally alter Zimmerman's system.

The Office Action's combination of references is impermissible hindsight reconstruction, as described in MPEP 2145. To establish a prima facie case of obvious under 35 U.S.C. 103, it is essential that the Office Action provide some motivation or suggestion to make the claimed invention in light of the prior art teachings. See, e.g., In re Brouwer, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996) and MPEP 2144.08. The Office Action does not provide any motivation to combine the references,

and accordingly fails to provide a prima facie case for obviousness. As MPEP Section 2143.01 indicates, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Accordingly, it is respectfully requested that this rejection be withdrawn.

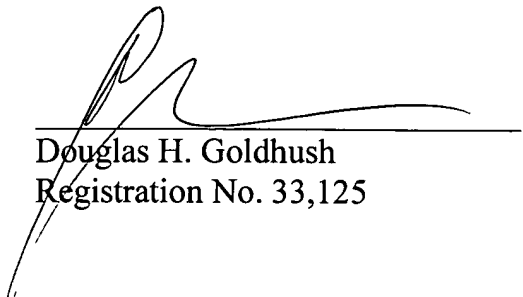
Conclusion

For the reasons described above, it is respectfully submitted that each of claims 1-20 recites a combination of features which is neither disclosed nor suggested in the prior art of record. Accordingly, it is respectfully requested that each of claims 1-20 be allowed and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Petition for a Three-Month Extension of Time
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